

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
31 March 2005 (31.03.2005)

PCT

(10) International Publication Number
WO 2005/028669 A1

(51) International Patent Classification⁷: C12Q 1/18

(21) International Application Number:
PCT/EP2004/052250

(22) International Filing Date:
20 September 2004 (20.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03103472.1 19 September 2003 (19.09.2003) EP
60/567,221 30 April 2004 (30.04.2004) US

(71) Applicant (for all designated States except US): TI-
BOTEC PHARMACEUTICALS LTD. [IE/IE]; Little
Island, Co Cork (IE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): VAN ACKER,
Koenraad, Lodewijk, August [BE/BE]; Uilenberg 30,
B-9140 Temse (BE). BUNKENS, Lieve, Elisabeth,
Louis [BE/BE]; Wipstraat 20, B-1800 Vilvoorde (BE).
DAMS, Géry, Karel, Julia [BE/BE]; Nieuwe Erven 11,
B-3583 Paal-Beringen (BE). HERTOOGS, Kurt [BE/BE];
Albert I laan 185 bus 401, B-8260 Nieuwpoort (BE).

IVENS, Tania, Pauline, Eduard [BE/BE]; Spoorweglaan
253, B-9120 Melsele (BE). NIJS, Erik, Jos, Amandus
[BE/BE]; Nopstal 8, B-3202 Rillaar (BE).

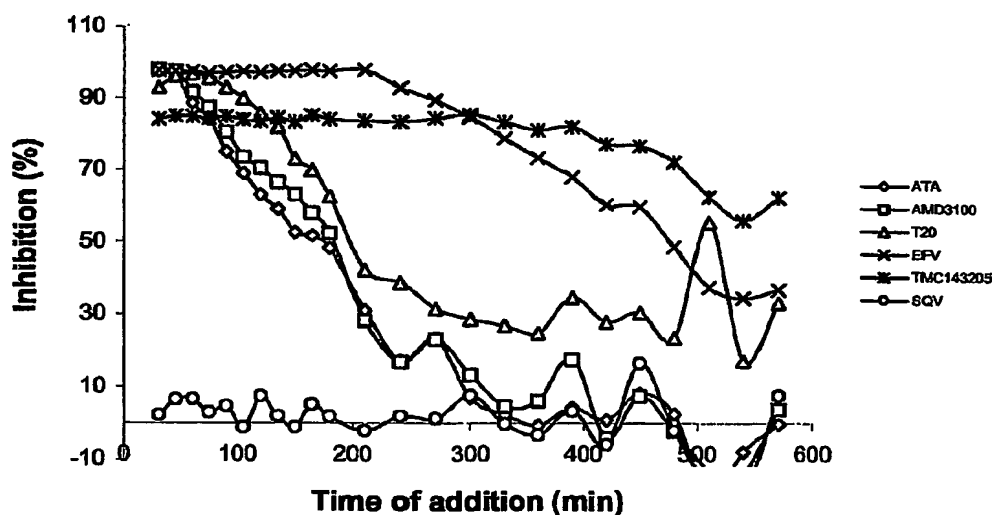
(74) Agent: DAELEMANS, Frank; Tibotec-Virco Comm.
VA, Generaal De Wittelaan L 11B 3, B-2800 Mechelen
(BE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: TIME-OF-ADDITION ASSAY FOR IDENTIFYING ANTI-VIRAL COMPOUNDS



(57) Abstract: The present invention relates to a multi-well assay for identifying a compound inhibiting the replication cycle of a micro-organism, for example, HIV, and to an apparatus for carrying out an assay according to the present invention. The invention further relates to compounds identifiable with an assay according to the invention and pharmaceutical compositions comprising a therapeutically effective amount of such compounds. The identified compounds may be used as medicaments, and in particular for the manufacture of a medicament for treating infectious diseases and in method for treating infectious diseases including AIDS.

**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,

IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
- of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.